Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1 – 20 (cancelled)

Please add the following new claims:

21. (New). A computer-implemented method for identifying an excess energy capacity in a production supply chain, comprising:

identifying, by a supply chain optimizer, a potential production configuration for the production supply chain for a supply chain operator capable of both consuming and selling electricity while operating the production supply chain, wherein the potential production configuration reduces a production output and energy consumption for at least some portion of the production supply chain during a time period where a contracted price for the electricity exceeds a forecasted price for the electricity, and wherein production supply chain operator may acquire the electricity at the contracted price;

determining, using a potential action valuation model, whether to reduce the production output of the production supply chain according to the potential production configuration to create the excess energy capacity for the production supply chain during the time period; and

if production output is determined to be reduced, selling the excess energy capacity created by implementing the potential production configuration during the time period.

22. (New). The method of claim 21, wherein the potential action valuation model determines whether to reduce the production output of the production supply chain using a risk management model.

23. (New). The method of claim 22, wherein the risk management model may be configured according to a set of risk tolerance criteria and risk performance criteria.

24. (New). The method of claim 21, wherein the forecasted price for electricity during the time period is determined using a forecasting and planning model utilizing historical and real-time data.

25. (New). The method of claim 21, wherein, if production output is determined to be reduced, prior to the time period, increasing the production output of the supply chain to prepare of the reduced production of the supply chain for the time period.

26. (New). The method of claim 21, wherein a data delivery engine is configured to supply real-time data to the potential action valuation model, the supply chain optimizer, the forecasting and planning model, and the risk management model.

27. (New). The method of claim 26, wherein the real-time data includes real-time commodity prices for electricity.

28. (New). A computer-readable storage medium containing a program which, when executed, performs operations for identifying an excess energy capacity in a production supply chain, the operation comprising:

identifying, by a supply chain optimizer, a potential production configuration for the production supply chain for a supply chain operator capable of both consuming and selling electricity while operating the production supply chain, wherein the potential production configuration reduces a production output and energy consumption for at least some portion of the production supply chain during a time period where a contracted price for the electricity exceeds a forecasted price for the electricity, and wherein production supply chain operator may acquire the electricity at the contracted price;

determining, using a potential action valuation model, whether to reduce the production output of the production supply chain according to the potential production configuration to create the excess energy capacity for the production supply chain during the time period; and

if production output is determined to be reduced, selling the excess energy capacity created by implementing the potential production configuration during the time period.

29. (New). The computer-readable medium of claim 28, wherein the potential action valuation model determines whether to reduce the production output of the production supply chain using a risk management model.

30. The computer-readable medium of claim 29, wherein the risk management model may be configured according to a set of risk tolerance criteria and risk performance criteria.

31. (New). The computer-readable medium of claim 28, wherein the forecasted price for electricity during the time period is determined using a forecasting and planning model utilizing historical and real-time data.

32. (New). The computer-readable medium of claim 28, wherein, if production output is determined to be reduced, prior to the time period, the operations further include increasing the production output of the supply chain to prepare of the reduced production of the supply chain for the time period.

33. (New). The computer-readable medium of claim 28, wherein a data delivery engine is configured to supply real-time data to the potential action valuation model, supply chain optimizer, forecasting and planning model, and the risk management model.

34. (New). The computer-readable medium of claim 33, wherein the real-time data includes real-time commodity prices for electricity.

35. (New). A computing device, comprising:

at least one processor; and

a memory, wherein the memory includes a plurality of models configured to identify an excess energy capacity in a production supply chain, including:

a supply chain optimizer configured to identify a potential production configuration for the production supply chain for a supply chain operator capable

of both consuming and selling electricity while operating the production supply chain, wherein the potential production configuration reduces a production output and energy consumption for at least some portion of the production supply chain during a time period where a contracted price for electricity exceeds a forecasted price for electricity, and wherein production supply chain operator may acquire the electricity at the contracted price;

a potential action valuation model configured to determine whether to reduce the production output of the production supply chain according to the potential production configuration to create the excess energy capacity for the production supply chain during the time period; and

a data delivery engine configured to supply real-time data to the potential action valuation model and to the supply chain optimizer.

36. (New). The computing device of claim 35, wherein the potential action valuation model determines whether to reduce the production output of the production supply chain using a risk management model.

37. (New). The computing device of claim 36, wherein the risk management model may be configured according to a set of risk tolerance criteria and risk performance criteria.

38. (New). The computing device of claim 35, wherein the forecasted price for electricity during the time period is determined using a forecasting and planning model utilizing historical and real-time data.

39. (New). The computing device of claim 35, wherein the real-time data includes real-time commodity prices for electricity.